2016
v1.0

User's manual

Backpack XL

Thanks for reading this manual before first use.

opale paramodels

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Thanks for having chosen an Opale-Parmodels product. We truly believe this remote-controlled paraglider is going to give you hours of enjoyment and will enable you to go through new outstanding piloting experiences. This user's guide content includes all the information you need to get your backpack in flight and to ensure you will take good care of it. A good knowledge of your equipment will allow you to safely obtain most of its performances for your greatest pleasure! Thanks for giving this manual to the new owner in case you decided to sell your radio-controlled paraglider.
Best regards,
The Opale-Paramodels Team

Safety Information
You should be properly insured according to the country regulation you are using our equipment in.
You hereby accept the inherent risk of flying radio-controlled models.
Using our equipment in a bad way may increase risks. Neither Opale-Paramodels nor any other seller
will be liable for any damage caused by any accident whatever the circumstances are. The way our equipment is used is incumbent upon the final user, including towards the law.

Summary

Warranty

The Backpack XL is guaranteed against any manufacturing defect.
If, while using, the pilot cut or damage a bridle, tear any part of the wing,repair and replacement of damaged parts are not taken in account by the warranty and the user will be charged for it.

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Backpack composition

- 1x18in propring
- 1x pilot Tom plate
- 1x wing fixation
- 1x pilot fixation
- 1x hardware kit

Specifications

Dimensions : 53x53x31cm / 20.8x20.8x12.2in
Minimum mass in order to fly : 5.2kg / 11.5lb (including pilot Tom / Frame / Motorization)
Maximum mass in order to fly : 12 kg / 26.4lb
Materials : Aluminium / Steel
Risers spacing : 22cm / 8.7in
Motorization: recommended wattage from 2000 up to 3500W
Maximum propeller size : 18in

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Assembly

Prepare the wing fixation with the pilot Tom plate. Hold the parts together with 2x CHC M5-20 screws, 2x washers and 2x M5 nuts.	
	
Then prepare the motorization. (not included) Fix the propeller shaft on the motor. Use some thread lock to secure the screws. The frame allows to receive several motor references. Each motor has a specific amount of screws for the propeller shaft. Please refer to your motor manual.	
Do the same operation for the motor crosspiece. It is crucial to use a crosspiece in order to ensure the steadiness of your motor.	

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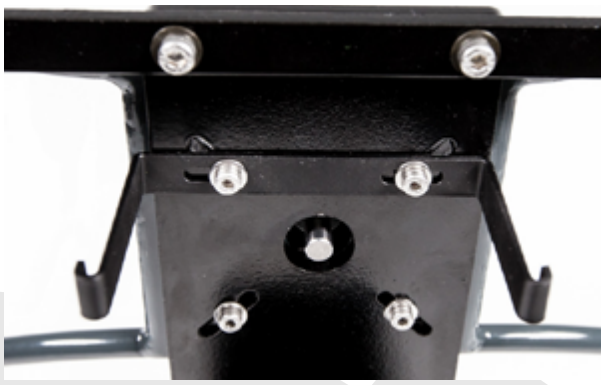
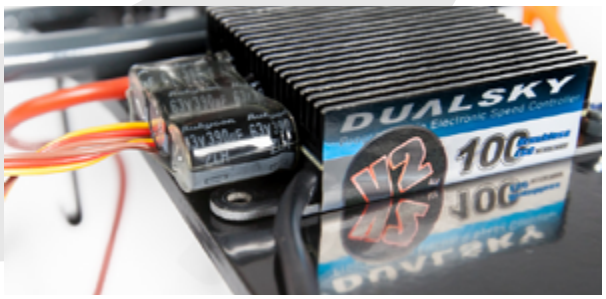
Place the 4 screws that will hold the pilot fixation, the propring and the motor all together.	
Between the motor and the propring, place 2 spacers per screw. The purpose of these spacers is to have the propeller plan aligned to the propring plan. If the propeller plan is slightly outside the propring plan, remove a set of spacers.	
Use 4 screws CHC M4-12 with M4 nuts to fix the ESC on the back of the pilot plate. Note: with some ESC references, it will not always be possible to use the 4 screws. Use at least 2 screws to maintain the ESC firmly.	
	

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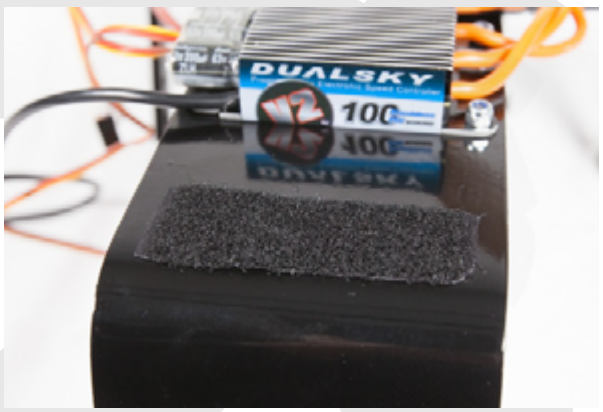
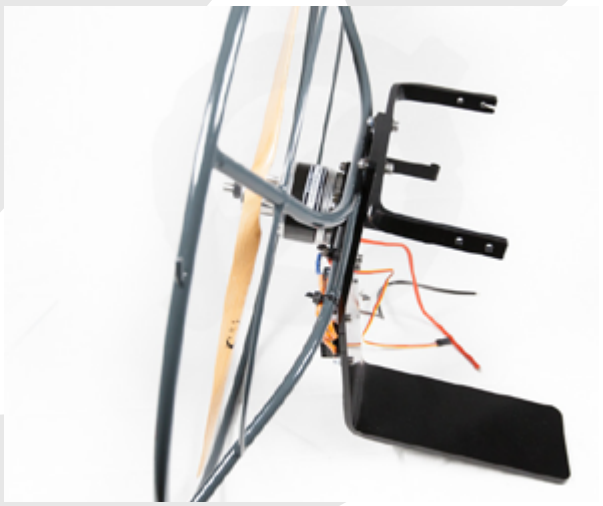
The leading edge of the propeller (the most rounded edge), has to be oriented toward the front of the frame. The trailing edge (the thinner edge), has to be oriented toward the back of the frame.	
Place some velcro adhesive (the male part) below the ESC, just above the bending of the pilot plate. This velcro will maintain the pilot harness.	
The frame is now ready to carry the pilot Tom.	

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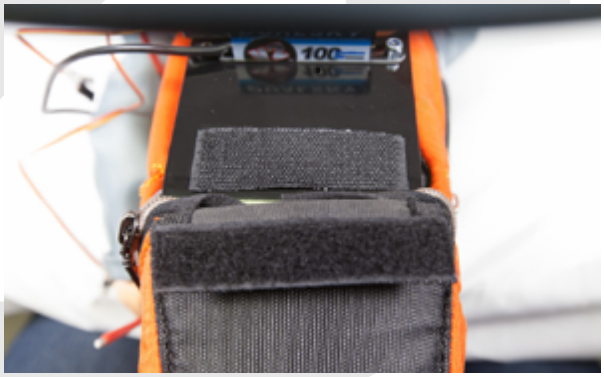
Installation of the pilot TOM

Open partially the lower pocket of the Tom's harness. This pocket contains a dedicated slot to maintain the Backpack XL.	
Insert the Backpack XL pilot plate into this slot.	
Close the pocket with the velcro flap of the harness.	
	

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Attach on one side of the pilot fixation the elastic provided. And pass it between the dorsal side of the harness and the back of the pilot.	
Attach then the elastic on the other edge of the pilot fixation.	
Pass all the wires through the hole dedicated to that purpose.	
Connect the ESC to the receiver installed inside the pilot. Do not hesitate to use a servomotor extension cable to connect / disconnect easily the ESC.	

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The lower pocket located below the pilot's legs is dedicated to carry the ballast. The ballast is only used when it becomes difficult to head into the wind. If your ground speed into the wind is lower than 5km/h, it will be necessary to land in order to add more ballast. Conversely, if the ground speed of the pararamotor is higher than 10km/h, you will have to reduce the weight of your model up to the minimal mass in order to fly of your wing.	
Using a rope and a screwdriver, hang the frame by the anchorage points. In order to get the optimum flying performances, choose the anchorage point allowing to get a level attitude or slightly pitch-up (5°).	
The model is now ready to take-off.	

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Take-off

Place the model into the wind. Grab the pilot by the legs, with 2 fingers inside the front pocket to hold firmly the model.	
Give a straight impulsion while taking a step backward. The wing will immediately inflate. Help the wing to inflate by continuing your step backward.	
Place your engine throttle in half position.	
Launch the model in front of you horizontally. Here you are the King of the airs !	

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F.A.Q. Questions / Answers

My RC paramotor seems not to move forward very fast. How to remedy this problem?'
If your model advance a little bit, or if it even stays on-the-spot, it is because your model is too light. In that case, you have to land and increase the weight with additional ballast or batteries until you obtain a 5 to 10 km/h with regard to the ground.

How do I know if the brakes bridle are adjusted correctly?
Brakes bridle are perfectly adjusted when the trailing edge is completely loose while flying, with the depth stick pushed up. Also, as soon as you push laterally of some millimiters the aileron stick, the trailing edge must begin to fold immediately. Otherwise, you must shorten centimeter by centimeter until you obtain an immediate control. It is a matter of the RC paramotor stability. The "Two inflating" method let perform a correct adjustment in 80% of cases. Think of it!

How do I know if the wing is correctly connected to the backpack?
When holding the model by the backpack/pilot, wing downwards, none of the bridle must cross, or turn around another bridle. Otherwise, you will have to untangle your wing. Before first flight, check the tightening of your inox buckles.

In what sense is it necessary to mount the propeller?
To obtain a maximal thrust, the propeller leading edge must be directed forward the backpack. It is easy to recognize the leading edge, because it is the bulged portion and non cutting side of the propeller. The trailing edge must be directed backwards. It is the cutting part of the propeller.
Generally, propellers have a logo or a marking. It is most of the time put on the leading edge.

How to inflate correctly his RC paramotor wing?
To inflate correctly his wing, it is essential to face it to the wind, at a sufficient distance from any obstacle. (generally 300m). Maintain your backpack at the basis and give a dry horizontal pulse while accompanying the rise of the wing. Throw smoothly the backpack straight away with a 50% engine speed.

I broke a bridle. How can I replace it?
The bridle can be replaced easily by following the splice method described in this manual.

My wife is fed up with looking at me sleeping with my RC paraglider. What can I do?
This is a very complicated situation at first sight. Nevertheless, two solutions can solve this problem. At first, you can lend her your credit card during sales period, or, in a second time, ask her for a friendly divorce. (But prefer the first solution, your RC paraglider's custody is in the game!).

There is a hole in my wing. How can I fix it?
A hole can be fixed in a few minutes thanks to the adhesive tissue provided with your wing. Follow the instructions described in this manual at the previous chapter.

Why my wing doesn't inflate, even when facing to wind?
If the wing doesn't inflate even when facing to the wind, the brakes bridle adjustment is too short. In that case, extend them centimer by centimeter then perform again the "two inflating" method, to ensure the control at first take off.

Is it possible to replace the risers ?
A riser can be replaced easily. Contact your Opale Paramodels dealer to obtain the correct reference.

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Is it possible for the RC paramotor wing to take away some material for shooting/FPV? Until which mass?
Each wing has a maximal takeaway capacity. Check the model total weight and compare it with the wing's take-away capacity. You will obtain the payload value, compatible or not with your equipment. Be careful, if you make your paramotor strongly heavy, think of a more powerful motorization, by keeping a 150 W motor ratio / Kg of complete model.

Can I fly anywhere with my wing? Is it a danger for the goods and the people?
You can't fly anywhere with your wing. To practice aeromodelling, you must own a third-party insurance and practice on a ground with the owner's agreement. Ideally, contact your aeromodelling federation. It is forbidden to fly in an urban zone and close to the houses. This type of model is not light, it can causes heavy physical and material damages. Use it carefully and without going above your limits.

Until which height can I fly the wing?
In order to not disturb aerial traffic, maximum authorized height is about 150m from the ground. Contact your federation and the organism of aerial traffic management of your country to have reliable information about it.

Is it possible for my hamster to fly my RC paramotor? Which precautions to take?
Check if your hamster is solidly attached to the backpack. The wear of a helmet and flysuit is advised. If you perform several 360) and wingovers, think of install under the batteries, a little plastig bag near its paws with few menthol candies.

Can I do another use of the paramotor wing?
This wing can be used for slope soaring without backpack. In that case, you will have to attach a pilot as real paraglider discipline.

Is it possible that the wing deflates while flying? Which behavior to adopt in that case?
If your wing deflates while flying and begin to reverse, it is because you have too much requested the brakes. To remedy this phenomenon, slacken gradually the radio sticks and think of cutting the throttle.

Is it important to untangle correctly the bridle befor flying? How can I do? I am lost with all those strings!
It is essential to untangle well the bridle. If not, you can strongly distort the flight characteristics of the wing. To untangle all the bridle fastly, drop the wing out of the backpack. Hold the riser by the endpoint and seize one by one the bridle around the principal bridle package Always take first the most distant bridle.

My wing is caught in a thermal and gets altitude. What can I do to regain control?
This scenario is usual when convection conditions are present. In that case, no panic. Relax and maintain a trajectory as rectilinear as possible to fastly go out of the thermal.

How can I maintain and clean my wing?
If you made your wing dirty, you can clean it with a wet cloth. You can rince it with clear water as well. Never use chemical products! The tissue could be hardly damaged. Think of tidy your wing in a dry place, shielded from UV and humidity.

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